

IN THE CLAIMS

1. (Original) A device comprising:

a substrate, further including:

a first major surface including a plurality of lands; and

a second major surface;

at least one component attached to at least some of the plurality of lands on the first major surface, the at least one spacer having a first height with respect to the first major surface; and

at least one sacrificial component attached to the first major surface, the at least one sacrificial component having a second height with respect to the first major surface, the second height greater than the first height, the at least one sacrificial component further including a fuse.

2. (Original) The device of claim 1 wherein at least one sacrificial component includes at least one solder contact.

3. (Original) The device of claim 1 wherein at least one sacrificial component includes at least two solder contacts.

4. (Original) The device of claim 3 wherein the fuse is positioned between the at least two solder contacts.

5. (Original) The device of claim 3 wherein the sacrificial component further comprises a body, the body further comprising:

a first body surface that includes the at least two solder contacts of the sacrificial component;

a second body surface substantially parallel with the first body surface devoid of a conductor.

6. (Original) The device of claim 1 wherein the device includes a semiconductor.

7. (Original) The device of claim 1 wherein the device includes a ball grid array semiconductor device.

8. (Original) The device of claim 1 wherein the at least one sacrificial component further comprises:

a body; and

a C-shaped conductor including a portion of which is embedded within the body.

9. (Original) The device of claim 8 wherein the C-shaped conductor includes a fuse, wherein the fuse is molded within the at least one body of the sacrificial component.

10. (Original) The device of claim 8 wherein the body is an insulative material.

11. (Original) An assembly comprising:

a ball grid array device, further including:

a first major surface including an array of lands;

a second major surface; and

an array of solder balls attached to a first portion of the array of lands;

at least one discrete component attached to a second portion of the array of lands;

and

at least one sacrificial component attached to a third portion of the array of lands, the sacrificial component having a fuse therein.

12. (Original) The assembly of claim 11 wherein the at least one discrete component has a first height, and the at least one sacrificial component has a second height greater than the first height.

13. (Original) The assembly of claim 11 wherein the at least one non sacrificial component is positioned to prevent the at least one discrete component from impacting another surface.

14. (Original) The assembly of claim 11 further comprising a printed circuit board, wherein the ball grid array device is attached to the printed circuit board, the at least one sacrificial component is positioned with respect to the printed circuit board to prevent the at least one discrete component from contacting the printed circuit board.

15. (Original) The assembly of claim 11 further comprising a printed circuit board, wherein the ball grid array device is attached to the printed circuit board, the printed circuit board further comprising:

a ground plane; and

a power plane,

wherein the at least one non operational, sacrificial component is formed of an insulative material and positioned with respect to the printed circuit board to prevent the at least one discrete component from contacting the ground plane and the power plane of the printed circuit board.

16. (Original) The assembly of claim 11 wherein the sacrificial component has a surface positioned near the printed circuit board that is devoid of electrically conductive material.

17. (Original) The assembly of claim 11 wherein the sacrificial component further comprises:

a body;

a conductor molded within the body, the conductor formed to present two contacts at a first body surface for attaching the contacts to a corresponding set of lands on the ball grid array device, the conductor molded within the body so that the body includes a second

body surface positioned near the printed circuit board that is devoid of electrically conductive material.

18. (Original) The assembly of claim 17 wherein the conductor is C-shaped, each of the free ends of the C-shaped conductor completed to one of two contacts.

19. (Original) The device of claim 17 wherein the conductor includes a fuse.

20. (Original) The device of claim 17 wherein the conductor includes a fuse, and wherein the fuse is molded within the body of the sacrificial component.

21. (Original) An assembly comprising:

a ball grid array device, further including:

a first major surface including an array of lands;

a second major surface; and

an array of solder balls attached to a first portion of the array of lands;

at least one discrete component attached to a second portion of the array of lands;

and

a plurality of non operational, sacrificial components attached to a third portion of the array of lands.

22. (Original) The assembly of claim 21 wherein the plurality of non operational, sacrificial components attached to a third portion of the array of lands includes at least three non operational, sacrificial components.

23. (Original) The assembly of claim 22 wherein the plurality of non operational, sacrificial components attached to a third portion of the array of lands pads have substantially the same height.

24. (Original) The assembly of claim 22 wherein the least one discrete component has a first height, and the plurality of non operational, sacrificial components attached to a third portion of the array of lands pads have a second height that is greater than the first height.

25. (Original) The assembly of claim 21 wherein the plurality of non operational, sacrificial components attached to a third portion of the array of lands each have a surface positioned away from the array of lands to which the plurality of sacrificial components are attached which is devoid of a conductive material.

26. (Original) The assembly of claim 21 wherein the plurality of non operational, sacrificial components attached to a third portion of the array of lands include a fuse.

27. (Original) The assembly of claim 21 further comprising a printed circuit board, the ball grid array assembly attached to the printed circuit board.

28. - 31. (Canceled)

32. (New) An assembly comprising:

a block of substantially nonconductive material further including:

a first major surface;

a second major surface;

one of the first major surface and the second major surface including:

a first solderable surface; and

a second solderable surface; and

a fuse positioned between the first solderable surface and the second solderable surface.

33. (New) The assembly of claim 32 wherein the first solderable surface, the fuse and the second solderable surface are electrically connected to one another.

34. (New) The assembly of claim 32 wherein the assembly is substantially electrically inactive when the first solderable surface and the second solderable surface are connected to a surface.

35. (New) The assembly of claim 32 wherein the other of the first major surface and the second major surface is devoid of material other than the substantially nonconductive material.